December 7, 1988

TO:

File.

FROM:

Scott Johnson, Reclamation Engineer Just

RE:

Mine Reclamation, Escalante Mine, Hecla Mining Company,

M/021/004, Iron County, Utah

The proposed mine abandonment and reclamation plan submitted by Hecla Mining Company on December 5, 1988 is adequate. The following changes are recommended in our response to the operators proposal:

Item 1: Use a 3 foot concrete plug.

Item 2: Use a 3 foot concrete plug.

Item 3: Use a 2 foot concrete plug.

Item 4: Use a 3 foot concrete plug.

Item 5: The bulkhead should be anchored on 3 foot centers by resin rock bolts on all four sides (top, ribs, and floor). The locked mandoor should overlap the bulkhead frame and should open out. The size of this mandoor should not exceed 12 square feet, and should be constructed of the same 1/2 inch steel plate that is used in the bulkhead construction. Suitable warning signs should be placed on the door and outby at the portal until final reclamation of this decline is completed.

Item 6: There are several pre-law shafts on the property. In the interest of public safety, we should urge Hecla to backfill these shafts with available material. Complete reclamation (i.e. concrete plugging, final grading and revegetation) of these areas will not be required.

Item 7: Acceptable as proposed.

jb cc: Wayne Hedberg Holland Shepherd MN17/22